



February 2002 Vol. 1 Issue 1

## Did You Know ?

**O&C Bldg., Room 1103**

**Hours of Operation:**

Monday - Friday  
7:00 am - 5:00 pm

Phone 321-867-7497

Fax 321-867-1144

*RehabWorks is a free on-site musculoskeletal rehab service for badged KSC and CCAFS employees with a work, non-work or sports-related injury. Prompt treatment for injuries. Checkout our Web page.*

## In Next Month's Issue

**Look to the March issue for  
the National Athletic Training  
Month Theme**

**Prevention: Avoid  
Injury - Stay Active**



## Web Links

American Medical Society for Sports  
Medicine

<http://www.amssm.org/>

Runners World

<http://runnersworld.com>

Gatorade Sports Science Institute

<http://www.gssiweb.com/>

## From The Supervisor

*Hello and welcome to the first edition of our new RehabWorks newsletter! Although many of you are familiar with our program, and have been recipients of the rehabilitative care that our facility offers, I thought that a newsletter would be the most effective means of bringing our athletic training room directly to you - where you work and spend 8-12 hours each working day of your life.*

*To begin, I would like to take this opportunity to thank you for the privilege of providing you with 5 great years of athletic training care. Since the program's inception in 1997, we have treated over 3000 patients for a total of over 11,000 visits. I must say that it is very satisfying to have gained the trust and confidence of so many of you, and my staff and I will continually strive to bring you quality athletic training care.*

*Now, some of you are asking yourselves, "What exactly is this athletic training?" I'm glad you asked! In this first issue and future monthly issues, the RehabWorks "Athletic Training Times" will open a world to you that until recently was only available to the professional or be a forum for you, the "industrial athlete", to ask questions of us in your pursuit of knowledge towards a healthier and more active lifestyle.*

*I look forward to hearing from you, I look forward to teaching you about the value of athletic training, and I look forward to our continued partnership in the health and wellness of KSC.*

*Sincerely,*

*Mary K. Kirkland, MS, ATC/L, CSCS*

**WEBSITE:** <http://rehabworks.ksc.nasa.gov>

## RehabWorks Tips

*Need to know when to use ice versus heat on an injury?  
Think R.I.C.E.!*

### R. I. C. E.

#### *Immediate Care of Musculoskeletal Injuries*

The purpose of R.I.C.E. (Rest, Ice, Compression and Elevation) is to minimize the effects of an injury from the very beginning, and to create the best environment for healing. This can reduce any loss of function and promote rapid recovery. This process can be used for at least 2-3 days after an injury and can **greatly** effect the total recovery time and quality of tissue repair.

## R = REST

Resting an injured area is necessary to allow the body time to get the effects of the trauma under control and to avoid additional stress and damage to the injured tissue. The period of rest required will vary depending on the severity of the injury (e.g. 10 minutes to 10 days). People who do not rest an acute (sudden, traumatic) injury can prolong the inflammation period and increase the healing time required, thereby delaying the recovery.

## I = ICE

Ice applied promptly to an injury can slow down or minimize some of the acute inflammatory reactions (inflammation is the redness, swelling and pain that follows an injury). The cold causes a vasoconstriction or closing of the arterioles in the tissue which reduces the bleeding; The local tissue metabolism slows down reducing its need for oxygen and nutrients which may be in short supply following the trauma of an injury; and the nerve impulses are slowed considerably to reduce the pain you feel, providing a numbing effect. Ex. Apply an ice pack to the injured area for 15-20 minutes on/ 1 hour off throughout the day, until bedtime.

**Heat should only be applied after about 3-5 days to be sure that the bleeding and swelling has stopped completely; otherwise, your recovery time will be delayed.**

## C = COMPRESSION

Compression is the application of an ace wrap or similar item around the injured area. Its purpose is to help control swelling and to provide mild support.

**NOTE: Any wrap should be applied carefully. Too tight a bandage could constrict or interrupt vital circulation to the area.**

## E = ELEVATION

This involves raising the injured area above the level of the heart as much as possible. This position promotes the lessening or elimination of swelling through the use of gravity and the lymph drainage system. An example of this would be to lie down and prop the injured area above the heart with pillows, cushions or similar support.

## Ask The ATC

**Q** *What is the difference between a strain and a sprain?*

**A** A strain is a tear of a tendon (muscle to bone attachment) and/or the muscle itself. Common injury areas include your quadriceps (anterior thigh muscle), hamstring (posterior thigh muscle) or achilles tendon (posterior ankle). A sprain tears a ligament (bone to bone attachment). Common areas of injury include the lateral ankle, AC joint (acromioclavicular joint of the shoulder) or ACL (anterior cruciate ligament inside the knee). Like a burn, both strains and sprains are graded first, second, or third degree, with first being the mildest and third being the most severe. Typical signs and symptoms include hearing or feeling a pop, snap or tear, with pain and loss of function of the involved body part. As with all acute injuries, ice as soon as possible to limit the amount of healing and rehab time!

## The Athletic Training Room

### *Reverse Golf Swings*

Low back pain from golf is a common occurrence. In order to limit musculoskeletal injuries due to the high-velocity forces during your golf swing, occasionally “untorque” your spine by swinging in the opposite direction. This uncoiling technique can be repeated for several practice swings every couple of holes. Imbalances arise more frequently in muscle fibers and ligaments under constant unidirectional force. Reverse swings allow for an uncoiling motion and help rebalance alignment and soft-tissue symmetry.

### *The RehabWorks Staff*

Supervisor	Mary K. Kirkland, MS, ATC/L, CSCS
Assist. Athletic Trainer	Erik T. Nason, MS, ATC/L, CSCS
Medical Records Clerk	Amy L. Rembert
Supervising Physician	Arthur A. Arnold, MD